| lı                                  | ndex of Cla | aims |            | Applica | atic         | on/Control No. | Applicant(s)/Patent under Reexamination |          |  |  |  |  |
|-------------------------------------|-------------|------|------------|---------|--------------|----------------|---|----------|--|--|--|--|
|                                     |             |      |            | 10/613  | ,28          | 38             | CUMMINGS                                |          |  |  |  |  |
|                                     |             |      |            | Examir  | ner          |                |   | Art Unit |  |  |  |  |
|                                     |             |      |            | Hanh \  | <b>V</b> . 1 | ran            | 3637                                    |          |  |  |  |  |
|                                     |             |      |            |         |              |                |   |          |  |  |  |  |
| √ Rejected – (Through num Cancelled |             |      |            | ıl)     | N            | Non-Elected    | A                                       | Appeal   |  |  |  |  |
| _                                   | Allowed     | ÷    | Restricted |         |              | Interference   | 0                                       | Objected |  |  |  |  |

| Cla  | im       | Date     |  |  |  |  |  | Claim Date                                       |  |          |          |          |          |                 | ı        | Claim Date |             |          |        |  |      |             |          | -               |          |          |          |          |          |          |          |               |
|--|----------|----------|--|--|--|--|--|--|--|----------|----------|----------|----------|-----------------|----------|------------|-------------|----------|--------|--|------|-------------|----------|-----------------|----------|----------|----------|----------|----------|----------|----------|---------------|
| CIE  | 11111    |          |  |  |  |  |  |  |  |          |          |          |          |                 |          |            | $\neg \tau$ | _        | _      | <del>-</del>                                     | ,ale |             |          | _               |          |          |          |          |          |          |          |               |
| Final  | Original | 7/23/06  |  |  |  |  |  |  |  |          | Final    | Original |          |                 |          |            |             |          |        |  |      | Final       | Original |                 |          |          |          |          | :        |          |          |               |
|  | 1        | П        |  |  |  |  |  |  | П  | $\neg$   |          | 51       | П        |                 | 一        | $\neg$     | T           |          | 1      | $\Box$   |      |             | 101      |                 | П        | $\neg$   | T        | П        |          |          |          |               |
|  | 2        |          |  |  | Г  |  |  |  |  | $\neg$   |          | 52       |          |                 | 寸        | $\neg$     | $\top$      | $\neg$   | $\top$ | $\Box$   |      |             | 102      |                 | 丁        | T        |          |          | $\neg$   |          |          |               |
|  | 3        | Н        |  |  |  |  |  |  | Н  | $\neg$   |          | 53       | $\vdash$ |                 | $\dashv$ | $\dashv$   | 十           | $\top$   | $\top$ | $\vdash$   |      |             | 103      |                 | $\neg$   | ╗        |          | $\neg$   |          | $\neg$   |          |               |
|  | 4        |          |  | _  |  |  |  |  | Н  | $\neg$   |          | 54       | $\vdash$ |                 |          | $\dashv$   | ┪           | 1        | $\top$ | 17   |      |             | 104      |                 | $\neg$   | $\neg$   | ヿ        | $\neg$   |          | $\neg$   | 一        |               |
| <b></b> -  | 5        | H        | $\vdash$   | _  | H  | $\vdash$   |  |  |  | $\dashv$ |          | 55       | 1        |                 | $\dashv$ | 十          | _           | $\top$   | $\top$ | Н  |      |             | 105      |                 |          |          | $\neg$   | $\neg$   |          | $\neg$   | ヿ        |               |
|  | 6        | $\vdash$ |  | $\vdash$   | _  |  | $\vdash$   | Н  | Н  | $\neg$   |          | 56       |          |                 | 7        | $\dashv$   | $\top$      | $\top$   | +      | Н  |      |             | 106      |                 | $\dashv$ | ┪        |          | $\neg$   | -        |          | $\dashv$ |               |
|  | 7        | -        |  |  | $\vdash$   | <del>                                     </del> | -  | $\vdash$   | Н  | -        | -        | 57       | H        |                 | -        | $\dashv$   | $\dashv$    | $\top$   | T      | $\vdash$   |      |             | 107      |                 |          | _        | _        | $\neg$   |          |          |          |               |
|  | 8        | ╁        | _  | _  | _  |  |  | H  | Н  | -        |          | 58       | 1        | $\dashv$        |          | $\dashv$   | 十           | $\top$   | $\top$ | $\Box$   |      |             | 108      | $\neg$          | 7        |          | $\neg$   | 一        |          | $\neg$   | _        |               |
|  | 9        | $\vdash$ |  |  | -  | -  | $\vdash$   | $\vdash$   | -  |          | -        | 59       |          | $\dashv$        | $\dashv$ | 十          | +           | +        | 1      | $\Box$   |      | $\vdash$    | 109      |                 | $\neg$   | 一        | $\neg$   | $\neg$   | $\dashv$ | 寸        | _        | _             |
| 1  | 10       | =        |  |  | -  | ┢  |  | $\vdash$   | $\vdash$   | $\dashv$ | -        | 60       | -        |                 | _        | $\dashv$   | $\dashv$    | +        | +      | $\Box$   |      |             | 110      |                 | $\neg$   |          |          | $\neg$   |          |          | $\neg$   | _             |
| 2  | 11       | =        | -  | H  | $\vdash$   | $\vdash$   |  | <del>                                     </del> | Н  | $\dashv$ | _        | 61       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$   | $\dashv$    | +        | +      | Н  |      |             | 111      | $\dashv$        | $\dashv$ |          | $\dashv$ |          | $\neg$   | $\dashv$ | -        | _             |
| 3  | 12       | =        | $\vdash$   |  | $\vdash$   |  | -  | -  | Н  | $\dashv$ | -        | 62       |          | $\forall$       | $\dashv$ |            | $\dashv$    | +        | +      | Н  |      | <u> </u>    | 112      | $\dashv$        | $\dashv$ | $\neg$   |          | -        | $\vdash$ |          |          |               |
| 4  | 13       | =        | -  | -  | $\vdash$   |  | <del>                                     </del> |  | Н  | $\dashv$ |          | 63       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$   | $\dashv$    | +        | +      | Н  |      |             | 113      |                 | $\dashv$ | _        | -        | $\dashv$ | Н        | $\dashv$ | $\neg$   |               |
| 5  | 14       | 듵        | -  | H  |  | 1  | -  |  | H  | $\dashv$ | -        | 64       | $\vdash$ | $\vdash$        | -        | $\dashv$   | $\dashv$    | +        | +-     | Н  |      |             | 114      |                 | $\dashv$ | $\neg$   | $\dashv$ | $\neg$   | $\vdash$ | $\neg$   |          | _             |
| اب   | 15       | 一        | -  | $\vdash$   | $\vdash$   | <del> </del>                                     | $\vdash$   |  | H  | $\dashv$ | <u> </u> | 65       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$   | $\dashv$    | +        | +      | Н  |      | -           | 115      | $\neg$          | $\dashv$ | $\dashv$ | $\dashv$ | 一        | $\vdash$ | 一        |          |               |
| <b></b> -  | 16       | $\vdash$ | <u> </u>   | -  | $\vdash$   | $\vdash$   | $\vdash$   |  | Н  | $\dashv$ | -        | 66       | H        | H               | -+       | 一          | $\dashv$    | +        | +      |  |      | <b>—</b>    | 116      |                 | $\neg$   | $\dashv$ |          | $\neg$   | Н        | 一        |          |               |
|  | 17       | ├-       | -  |  | $\vdash$   | ╁  | -  |  | Н  | -        | -        | 67       | +        | $\vdash$        | -+       | $\dashv$   | $\dashv$    | $\dashv$ | +      | +  |      |             | 117      |                 | -        | $\neg$   |          | $\neg$   | $\neg$   | _        |          | _             |
| _  | 18       | -        | ┢  | -  | $\vdash$   | -  | _  | -  | Н  | -        | <b>—</b> | 68       | ╁╌       | -               | $\dashv$ | $\dashv$   | $\dashv$    | +        | +      | $\vdash$   |      |             | 118      |                 | -        | $\dashv$ | $\dashv$ | $\neg$   | $\dashv$ |          |          | _             |
|  | 19       | -        | -  | -  | $\vdash$   | ┢╌   |  | -  | $\vdash$   | $\dashv$ |          | 69       | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$   | +           | +        | +-     | $\vdash$   |      |             | 119      |                 | -        | $\dashv$ | $\dashv$ |          |          | _        |          |               |
|  | 20       | $\vdash$ | $\vdash$   | -  |  | -  | <del> </del>                                     | $\vdash$   | -  | -        |          | 70       | ╁        | $\vdash$        | $\dashv$ | $\dashv$   | $\dashv$    | +        | +      | $\vdash$   |      | -           | 120      | $\vdash$        | _        | $\neg$   | -        |          |          |          |          |               |
| _  | 21       | -        | ⊢  | ├  |  | ┢  | -  | ⊢  | $\vdash$   | _        |          | 71       | ╁╌       | $\vdash$        | $\dashv$ | $\dashv$   | $\dashv$    | +        | ╁      | +  |      |             | 121      | $\vdash$        | _        |          |          | $\dashv$ |          |          | $\neg$   |               |
|  | 22       | ┢        | ├  | <del>  -</del>                                   |  | <del> </del>                                     | -  | -  | $\vdash$   |          |          | 72       | ╁        | $\vdash$        | $\dashv$ | +          | $\dashv$    | _        | +      | +  |      | <u> </u>    | 122      | $\vdash$        | -        | $\neg$   |          |          |          |          | _        | _             |
| -  | 23       | ┢        | ┝  | ┝  | ├  | ├  |  | _  | $\vdash$   |          |          | 73       | -        | $\vdash$        | -+       | $\dashv$   | $\dashv$    | +        | +-     | $\vdash$   |      | _           | 123      | $\vdash$        | $\neg$   |          |          |          | _        |          | $\neg$   |               |
| <del>                                     </del> | 24       |          | $\vdash$   | <del> </del>                                     | -  | -  |  | $\vdash$   | -  | $\dashv$ |          | 74       |          | $\vdash$        | $\dashv$ | 7          | _           |          | +-     | $\vdash$   | i    |             | 124      | $\vdash$        | 寸        |          |          |          |          |          |          |               |
| <del></del>                                      | 25       |          | -  | <del> -</del>                                    | ┢  | $\vdash$   |  | ┝  | -  | $\dashv$ |          | 75       | Н        | $\vdash$        | 寸        | +          | 十           | +        | +      |  |      | $\vdash$    | 125      | Н               | _        | $\neg$   |          |          |          |          | $\neg$   |               |
| $\vdash$   | 26       | $\vdash$ | $\vdash$   | ┢  | ├  | ┢  |  | H  | -  | $\dashv$ | $\vdash$ | 76       | $\vdash$ | -               | $\neg$   | _          | ╅           | _        |        | $\vdash$   |      |             | 126      | $\Box$          | ┪        |          | $\dashv$ |          |          |          |          |               |
| <del></del>                                      | 27       | ┢        | $\vdash$   | -  |  | ╁  | $\vdash$   | $\vdash$   | $\vdash$   | $\dashv$ |          | 77       | ╁        |                 | +        | +          | +           | - -      | +      |  |      |             | 127      | $\vdash$        | ┪        | _        |          |          |          |          |          |               |
|  | 28       |          | $\vdash$   | -  | <del> </del>                                     | $\vdash$   |  | ⊢  | -  | $\dashv$ |          | 78       | ╁        | $\vdash$        |          | -+         | +           |          | +      | $\vdash$   | l    |             | 128      | H               | _        |          | $\vdash$ |          |          |          |          |               |
|  | 29       | ├        | <del>                                     </del> | $\vdash$   |  | ╁╌   | ┢  | ┢  | $\vdash$   | $\dashv$ | _        | 79       | $\vdash$ | $\vdash$        | $\neg$   | +          | -+          | +        | +      | $\vdash$   |      |             | 129      | H               | _        | $\neg$   | $\Box$   |          |          |          | _        |               |
|  | 30       | $\vdash$ | ├  | ┢  | -  | ╁╌   | -  | $\vdash$   | $\vdash$   | $\vdash$ | _        | 80       | t        | H               | $\dashv$ |            | -           | +        | +-     | <del>                                     </del> | l    |             | 130      | $\vdash$        | _        |          |          | -        | Н        |          |          |               |
|  | 31       | ├        | -  | ┝  | -  | ├-   | -  | $\vdash$   | $\vdash$   | $\dashv$ | _        | 81       | ╁        | H               | -        | _          |             | +        | +      | $\vdash$   | l    | <b></b>     | 131      | $\vdash$        | -        | -        | Н        |          | Н        |          |          |               |
|  | 32       | $\vdash$ | $\vdash$   | -  | -  | ╁╴   | $\vdash$   | $\vdash$   | $\vdash$   | $\dashv$ |          | 82       | +        | $\vdash$        | $\dashv$ | $\dashv$   | 十           | $\dashv$ | +      | +  | l    |             | 132      | $\vdash$        | -        |          | $\vdash$ | _        | Н        | $\neg$   | $\neg$   | _             |
|  | 33       | -        | $\vdash$   | $\vdash$   | -  |  | $\vdash$   | 1  | $\vdash$   | -        |          | 83       | ┼        |                 |          | _          | $\dashv$    | +        | +-     | +  |      | <b></b>     | 133      |                 | $\dashv$ |          |          |          | Н        |          | $\dashv$ | _             |
|  | 34       | -        | $\vdash$   | -  | -  | ╁  | $\vdash$   | <del>                                     </del> | -  | $\dashv$ | _        | 84       | +-       | $\vdash$        | $\dashv$ | +          | $\dashv$    | +        | +      | $\vdash$   | l    | <u> </u>    | 134      | H               |          | $\vdash$ | $\vdash$ | $\vdash$ | Н        | $\dashv$ | $\neg$   | _             |
| <del> </del>                                     | 35       | $\vdash$ | $\vdash$   | -  |  | $\vdash$   | $\vdash$   | $\vdash$   | -  | $\dashv$ | _        | 85       | †        | $\vdash$        | $\dashv$ | +          | $\dashv$    | +        | +      | $\vdash$   |      | <u> </u>    | 135      | $\vdash$        |          |          | Н        |          | П        | Н        |          | $\overline{}$ |
| <u> </u>   | 36       | -        | $\vdash$   | -  | $\vdash$   | -  | $\vdash$   | <del>                                     </del> | <del>                                     </del> | $\dashv$ |          | 86       | +        | $\vdash$        | $\dashv$ | $\dashv$   | $\dashv$    | $\dashv$ | +      | $\vdash$   |      |             | 136      |                 | -        |          | Н        |          | $\vdash$ | $\vdash$ |          |               |
| <b></b>  | 37       | $\vdash$ | <del>                                     </del> | $\vdash$   | $\vdash$   | <del>                                     </del> | $\vdash$   | 1-   | -  | $\dashv$ |          | 87       | +        | $\vdash$        | $\dashv$ | +          | $\dashv$    | +        | +      | $\vdash$   | i    | <b></b>     | 137      | $\vdash$        | $\neg$   | $\vdash$ | $\vdash$ | $\vdash$ | Н        | $\vdash$ |          | -             |
| <u> </u>   | 38       | $\vdash$ | -  | $\vdash$   | -  | H  | $\vdash$   | -  | 1  | $\dashv$ |          | 88       | $\vdash$ |                 | $\dashv$ | $\dashv$   | 十           | +        | +      | $\vdash$   |      | $\vdash$    | 138      | $\vdash$        | $\dashv$ |          | Н        |          | Н        | Н        | $\neg$   | _             |
|  | 39       | $\vdash$ | $\vdash$   | -  |  | +  | ├  | $\vdash$   | <del>                                     </del> | $\dashv$ | }        | 89       | +        | $\vdash$        | $\dashv$ | -          | 十           | 十        | +      | T  | ĺ    |             | 139      | -               |          |          | Н        |          |          | Н        | $\neg$   |               |
|  | 40       | $\vdash$ | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | -  | $\vdash$   | $\dashv$ |          | 90       | t        | $\vdash$        |          | -          | $\dashv$    | ┪        | ╁      | $\vdash$   |      |             | 140      | -               |          |          |          |          | $\Box$   | Н        | $\neg$   | _             |
| <del></del>                                      | 41       | $\vdash$ | -  | $\vdash$   | -  | +-   | <del> </del>                                     |  | $\vdash$   | $\dashv$ |          | 91       | $\vdash$ | $\vdash \vdash$ | -        | $\dashv$   | $\dashv$    | +        | +      | T  | l    | $\vdash$    | 141      | $\vdash$        | $\dashv$ | -        | Н        | $\vdash$ |          | $\vdash$ | $\neg$   | Н             |
| <u> </u>   | 42       | $\vdash$ | $\vdash$   | -  |  | $\vdash$   | <del> </del>                                     | <del>                                     </del> | $\vdash$   | $\dashv$ | -        | 92       | $\vdash$ | H               | -        | $\dashv$   | $\dashv$    | +        | $\top$ | T  | 1    |             | 142      | Н               |          | $\neg$   |          |          |          | Н        | $\neg$   |               |
| <del></del>                                      | 43       | $\vdash$ |  | -  | <del>                                     </del> | $\vdash$   | t  |  | ┢  | $\dashv$ | -        | 93       | +-       | $\vdash$        | 一        | -          | _           | +        | +      | T  | İ    | <u> </u>    | 143      |                 | $\neg$   |          | Н        |          |          | Н        |          |               |
| <u> </u>   | 44       | $\vdash$ | $\vdash$   | $\vdash$   | 1  | <del>                                     </del> | H  |  | Н  | $\dashv$ |          | 94       | T        | $\vdash \vdash$ | -        | 一          | $\dashv$    | $\dashv$ | +      | T  | 1    | <b></b>     | 144      |                 |          |          | Н        |          |          | Н        | $\neg$   | $\vdash$      |
| $\vdash$   | 45       | ╁        | -  | $\vdash$   | $\vdash$   | $\vdash$   | <del>                                     </del> | $\vdash$   | <del>                                     </del> | $\vdash$ | -        | 95       | $\vdash$ | $\vdash$        |          | +          | 十           | $\dashv$ | +      | $\vdash$   |      |             | 145      | $\vdash$        | -        | -        | $\vdash$ |          | $\vdash$ | Н        |          | -             |
| <b>—</b>   | 46       | $\vdash$ | -  | ╁  | -  | <del>                                     </del> | $\vdash$   | $\vdash$   | 1  | $\vdash$ |          | 96       | +        |                 | $\dashv$ | $\dashv$   | $\dashv$    | +        | +      | $\vdash$   | 1    | <b>—</b>    | 146      |                 | -        | $\Box$   | H        |          | $\vdash$ | $\vdash$ |          |               |
| <b>—</b>   | 47       | 1        | $\vdash$   | <del>                                     </del> | $\vdash$   | $\vdash$   | -  | <del>                                     </del> | $\vdash$   | $\vdash$ | $\vdash$ | 97       | +-       | $\vdash$        | $\dashv$ | $\dashv$   | $\dashv$    | $\dashv$ | $\top$ | $\top$   | ĺ    |             | 147      | $\vdash \vdash$ |          | П        | Н        |          | $\vdash$ | Н        | -        |               |
| <del> </del>                                     | 48       | t-       | $\vdash$   | $\vdash$   | $\vdash$   | <del>  -</del>                                   | $\vdash$   | $\vdash$   |  | Н        | $\vdash$ | 98       | $\vdash$ | $\vdash$        | +        | $\dashv$   | $\dashv$    | +        | +-     | 1  | 1    | $\vdash$    | 148      | $\vdash \vdash$ | $\dashv$ | Н        | Н        | $\vdash$ | $\vdash$ | Н        |          | Т             |
| <del>                                     </del> | 49       | -        | $\vdash$   | $\vdash$   | $\vdash$   | 1  | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$ | -        | 99       | +        | H               | $\dashv$ | -          | $\dashv$    | $\dashv$ | +      | +-   | 1    |             | 149      | H               | $\dashv$ | $\vdash$ | $\vdash$ | Н        |          | $\vdash$ | _        | Т             |
| <del>                                     </del> | 50       | ┢╾       | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | -  | $\vdash$   | <del>                                     </del> | $\vdash$ | -        | 100      | +-       | $\vdash$        | $\dashv$ | ᆉ          | $\dashv$    | +        | +-     | +  | 1    | <del></del> | 150      | $\vdash$        | $\dashv$ | -        | $\vdash$ |          |          | $\vdash$ |          |               |
|  | 100      |          |  | L  | L  |  |  | 1  | 1  |          |          | 1.00     |          |                 |          |            |             |          |        |  | J    |             |          |                 |          |          |          |          |          |          |          |               |